IV.    (U)    BASIC RESEARCH:

1.    Neurophysiological Correlates:

- Determine potential magnetoencephalograph (MEG) visual response correlates:

    - Between talented people and a variety of external near-field stimuli conditions.

    - Between talented people and a variety of external far-field stimuli conditions.

- Determine potential MEG non-visual correlates:

    - Between talented people and a variety of external near and far field stimuli conditions.

- Initiate research to identify and locate brain areas where parapsychological data may originate:

    - Extend research to show how data is eventually processed into conscious awareness.

2.    Psychophysical Correlates:

- Determine potential for psychophysical parameters:

    - Galvonic skin response (GSR).

    - Other central nervous system (CNS) parameters.

    - Role of distance and other variables.

    - Potential for counter-influence.

3.    Physical/Psychophysical Model Exploration:

- Role of target "state" (degree of energy, chaos, size, distance, shielding, target format, etc.).

- Role of psychological factors (goal, empathy, target type, etc.).

4

- Role of other possible influencing parameters (i.e., no "sender" present, presence of "sender," and degree of linkage).

- Other candidate factors.

4. Altered State Investigations:

- Determine if various altered states can improve data reliability (eg., lucid states, deep relaxation conditions).

- Determine if various altered states correlate with cognitive style or with target type.

5. Potential Influences of External Fields:

- Determine if geomagnetic influence can affect results.

- Develop new experiments with adjustable external field conditions.

6. Develop a Comprehensive Target Pool:

- To help sort out possible target characteristic influences.

- To use as a possible screening device.

- For assessing application issues.

7. Initiate Evaluation of "Energetics":

- Identify possible "follow-on" with available select talent (when located).

- Visit people/areas to observe demonstration.

- Identify equipment monitoring needs.

5

V.    (U)    <u>APPLIED RESEARCH</u>:

1.    Neurophysiological Correlates:

–    Develop magnetoencephalograph (MEG)
     screening/selection techniques (visual, non-
     visual).

     –    Measure sufficient known talent.

     –    Measure other select populations (e.g.,
          creative, yogi, martial arts).

     –    Measure general population.

–    Examine feasibility for refinement to permit
     talent sorting according to task type or need
     (e.g., visual vs. verbal style).

–    Perform follow-on talent validation experiment
     with new candidates to  confirm MEG findings.

–    Use as a check for training/development status
     or progress.

     –    Evaluate individual strategies.

     –    Evaluate specified training programs.

     –    Examine feasibility of transmitting
          information (i.e., via redundancy coding
          methods) for near-field and far-field
          conditions according to cognitive style.

2.    Physiological Correlates:

–    Determine potential of information transmission
     via GSR or other CNS parameters.

3.    Application-Oriented Issues:

–    Investigate neurophysiological/psychophysical
     measures useful for predicting data quality.

–    Determine if self reports, focused intent, or
     other factors can be found that help in
     predicting data quality.

6

- General screening investigations:

  - Develop new target pools that are comprehensive and can identify various talent and talent preferences.

  - Conduct in-depth study of people previously involved in this research to search for patterns in background, personality, or other factors.

  - Reassess/investigate psychological or psychophysical measures that show promise for screening:

    - Defense Mechanism Test (DMT).

    - Stanford Hypnotic Suggestibility Scale.

    - Subliminal Perception Responses.

- Application improvements (Intelligence Related):

  - Examine methods for improving information quality or reliability:

    - New internal strategies.

    - Task/response timing.

    - Specific goal setting.

    - Spatial/temporal issues on strategies for search improvement.

    - Determine if results from conventional altered state research have applicability to application quality/reliability improvement.

    - Conduct various experiments, review data bases, and apply various evaluation methods to determine application potential and to identify methods of improving data quality as appropriate.

Explore other applications:

- Communications potential:

7

- Use of redundancy coding (with conscious response).

- Incorporate with other basic/applied projects.

- Simulate "real" problems:

  - Hostages (lost people).

  - Underground or submarine environment.

- Predictive:

  - Identify approaches for follow-on.

  - Involve other labs, other talent.

  - Examine influences of event complexity, time-of-occurrences.

  - Tie to psychological/cognitive style.

- Code breaking:

  - Perform preliminary investigations for follow-on.

- Training Developments:

  - Develop improved ways t measure or evaluate the role of training, the training method, practice, goal setting, session timing, or other factors.

  - Review a wide variety of "training development" approaches to identify candidate avenues for new basic/applied research (e.g., potential use of subliminal perception training).

  - Compile appropriate evaluation procedures and statistics:

    - Use of control groups.

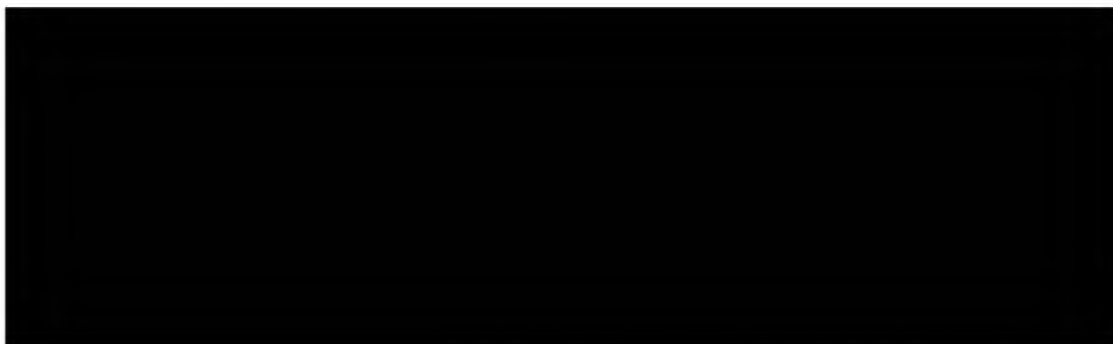    - Improved artificial intelligence methods.

8

    —    Bias detection methods.

    —    Other

SECRET

VI.   (U)   OTHER ACTIVITIES:

SG1B



2.   Develop "Multi-Disciplined: Research Plan:

-   To incorporate findings from FY91 work.

-   Develop new interlab/interdisciplinary links
    with:

    -   Neuro-cognitive sciences.

    -   Optical data processing/neuro network
        technology.

    -   Altered state research:

        -   Hypnogogic/Hypnopompic

        -   Other

    -   Advanced physical theories:

        -   Recent viewpoints on gravitation.

        -   Postulates involving scalar waves.

        -   Other

3.   Activity Support:

-   Research Management.

-   Scientific Oversight Committee (SOC).

-   Human Use Review.

-   Computer Support.

-   Misc. (Admin., TDY).

10

SECRET

VII. (U)   SCHEDULE CONSIDERATIONS:

(U)   The following pages contain table summaries of key activities identified in the previous sections.   Estimated level-of-effort, as well as key milestones and other data, are included on the tables.

11

EXTERNAL SUPPORT – FY91

BASIC RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|---|---|---|---|---|
| 1. Neurophysiological Correlates | | | | |
| – Visual Response MEG | | | | |
| – Non-Visual MEG | | | | |
| – For Select and Control Groups | | | | |
| – For Near and Far Field | | | | |
| 2. Physiological Correlates | | | | |
| – Candidate CNS | | | | |
| – Near and Far Field | | | | |

SECRET

SECRET

12

EXTERNAL SUPPORT – FY91

BASIC RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|-----------|-----------|-----------|

3. Energetics Phenomenon

   – Initiate Review

   – Locate People

   – Develop In-Depth Plan

   – Identify Equipment

4. Physical/Psychophysical

   – Physical, Cognitive Constructs

       – Target State, Environment

       – Possible Variables

   – Comprehensive Target Pool

   – External Field Effects

13

EXTERNAL SUPPORT - FY91

BASIC RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|-----------|-----------|-----------|

5. Altered State Investigations

- Lucid States; Other Noise
  Reduction Conditions

- Correlation to Cognitive
  Style

6. Review of Relevant Conventional
   Research

- Neurosciences/Biophysical

- Advanced Physics

- Psychological Issues

14

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|-----------|-----------|-----------|

1. Neurophysiological Correlates

- Visual MEG

- Non-visual MEG

- Select, Control Groups

- Information Transmission

2. Physiological Correlates

- CNS Parameters

- Screening/Selection

- Information Transmission

15

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|---|---|---|---|---|

3. Application Enhancement

- Factors for Predicting/
  Improving Data Quality

  - Pattern Analysis

  - Strategies, Training

  - Other

- Use of Multiple Sources

- Task/Person Matching

  - Calibration Target Pools

  - Talent Quantification

- Insight from Talented People

- Use of Selection Aids

  - Psychophysical Measures

  - Subliminal, Other Scales

  - MEG Findings

16

EXTERNAL SUPPORT — FY91

APPLIED RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|------|------|------|------|

4.  Explore Various Applications

    -   Intelligence Needs

    -   Communication Potential

        -   Subconscious (MEG)

        -   Conscious  (RV, Other)

        -   Coding Techniques

    -   Predictive

        -   Preliminary Investigations

        -   Develop Follow-On Plan (FY92+)

        -   Multi-Labs

        -   Timing/Complexity

        -   Cognitive Style

    -   Code Breaking

        -   Preliminary Investigations

17

EXTERNAL SUPPORT – FY91

APPLIED RESEARCH

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|------------|------------|-----------|

5.  Training/Development Investigations

    – Review Worldwide Literature

    – Role of Training, Practice,
       Goal Setting, Other


6.  Evaluation Procedures/Statistics
      Manual

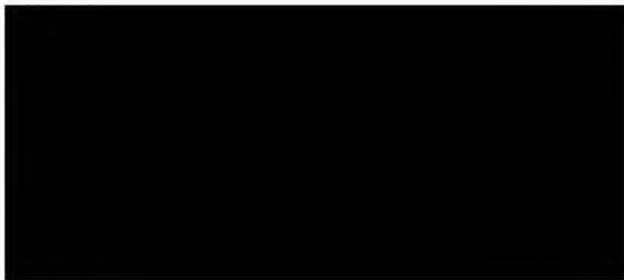    – Research Projects

    – Various Operational Activities

SECRET

18

EXTERNAL SUPPORT - FY91

OTHER ACTIVITIES

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|-----------|-----------|-----------|

SG1B



2. Develop Comprehensive Multi-Disciplinary Plan (For FY92+)

- Integrated, Multi-Lab

- Neurosciences/Cognitive Sciences

- Advanced Research (Physics, Biophysics)

- Other

19

EXTERNAL SUPPORT - FY91

OTHER ACTIVITIES

| AREA | EST. LEVEL OF EFFORT | EST. START | EST. COMP. | INTERFACE |
|------|---------------------|------------|-----------|-----------|

3.  Activity Support

    —  Research Management

    —  Scientific Oversight Committee (SOC)

    —  Human Use Review

    —  Computer Support

    —  Travel

    —  Administration

20